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FOOD APARTHEID AND THE HEALTH OF MINORITY CHILDREN: A CASE STUDY OF WASHINGTON, DC

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ABSTRACT

In recent years, terms such as "food deserts," "food apartheid," and "the grocery gap" have gained attention, highlighting the systemic inequities in food access. Food apartheid, the deliberate placement of unhealthy fast-food chains over healthier alternatives, often in minority neighborhoods, is linked to high consumption of saturated fats, sodium, and sugar. Reports by the Centers for Disease Control and Prevention (CDC) and the United States Department of Agriculture (USDA) associate this diet with long-term health issues, including diabetes, hypertension, and certain childhood cancers. A review of the available research traces these inequities to the legacy of redlining, a policy implemented by the Federal Housing Administration in the 1930s. Redlining systematically denied mortgages to African-American neighborhoods to enforce segregation, creating underprivileged districts often referred to as ghettos. Fast-food companies later exploited these classifications, targeting low-income minority communities, particularly children, with advertisements and tactics promoting unhealthy, low-cost products. This practice has perpetuated food apartheid, disproportionately and systematically harming the physical and emotional health of minority children.

KEYWORDS: Food Apartheid, Food Sovereignty, Redlining, Health Disparities, Minority Health

INTRODUCTION

At first glance, the lack of access to nutritional meals in low-income areas across America might appear to be a consequence of fast-food chains prioritizing profit. However, this issue extends beyond economic factors; it represents the systematic and deliberate targeting of low-income racial minority families by fast-food chains such as McDonald's, Subway, and KFC. This practice inhibits access to grocery stores, dietary education, and equitable healthy alternatives, culminating in what is now referred to as "food apartheid." This phenomenon disproportionately increases the risk of severe health issues in low-income racial minority communities.

The term "food desert" has often been used to describe areas with limited access to nutritious food. However, this terminology fails to emphasize the deliberate decisions by corporations that exploit historical systems of inequality, such as redlining, to maximize profits. Redlining, established by the Home Owners' Loan Corporation (HOLC) during the 1930s, classified neighborhoods based on the proportion of Black, Hispanic, and disabled residents. Neighborhoods graded as "C" (indicating a "decline in desirability") and "D" ("hazardous") were systematically denied resources, including access to fresh and nutritious food, compared to areas graded "A" (considered "best") (Shaker, Grineski, et al., 2022).

Fast-food companies have further perpetuated this inequality by targeting children, a strategy shown to create lifelong consumer loyalty. Studies, such as those by Park (2018), demonstrate how advertising campaigns, including those for Happy Meals featuring toys modeled on popular movie characters, significantly increase children's desire for these products. This marketing tactic ensures a steady consumer base while bypassing adults who may be more aware of the health risks associated with such diets.

The consequences of these practices are evident in rising childhood obesity rates. According to the American Psychological Association (APA, 2012), the prevalence of obesity has more than doubled among children aged 2 to 5 (from 5.0% to 12.4%) and 6 to 11 (from 6.5% to 17.0%). Among teenagers aged 12 to 19, obesity rates have tripled (from 5.0% to 17.6%). Childhood obesity not only increases the likelihood of obesity in adulthood but is also associated with serious health outcomes, including diabetes, cardiovascular disease, and certain types of cancer. Reducing excess weight gain during childhood is thus critical to preventing long-term health complications for both children and adults.

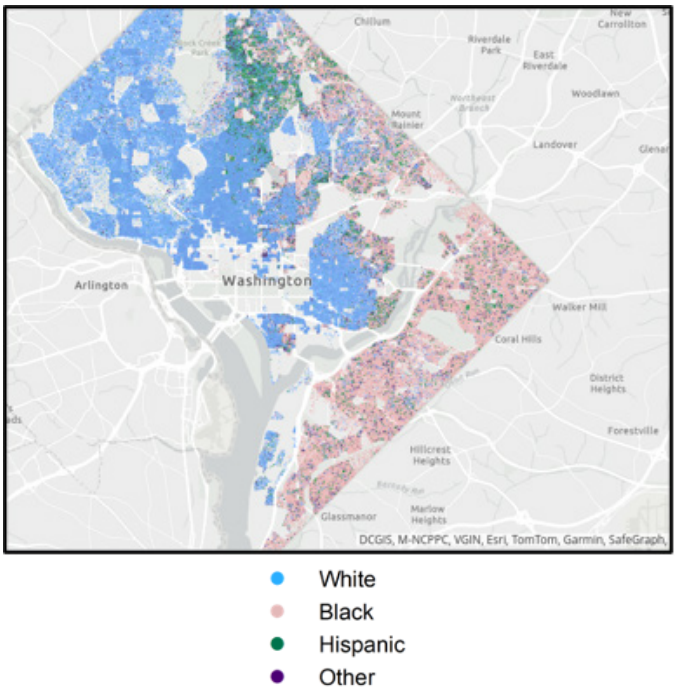
Food Apartheid

The term coined by Karen Washington, emerged from the food sovereignty movement, which aimed to shed light on the causes behind what the U.S. government refers to as "food deserts." These are areas where limited access to affordable and healthy food is driven by systemic racism and practices like redlining, which have led to increased rates of chronic disease in Black, Indigenous, and other minority communities (Jensen, 2024). Food Apartheid calls for an interrogation of the policies, systems, and laws that perpetuate hunger, challenging the notion that hunger in this wealthy country is a naturally occurring phenomenon that merely requires documentation by those in power (Bedford Stuyvesant Restoration Corporation, 2022).

As a result of the hyper-saturation of unhealthy foods and predatory marketing techniques employed by a corporate-controlled food system, communities affected by Food Apartheid suffer from some of the highest rates of heart disease and diabetes. Redlining exacerbated these issues by pushing non-white communities farther from urban centers to make room for white residents. This practice deepened segregation based on race and socioeconomic status (SES) while also impacting food allocation, leaving many communities without access to healthy food options. Large corporations capitalized on this system, ultimately contributing to the creation of Food Apartheid.

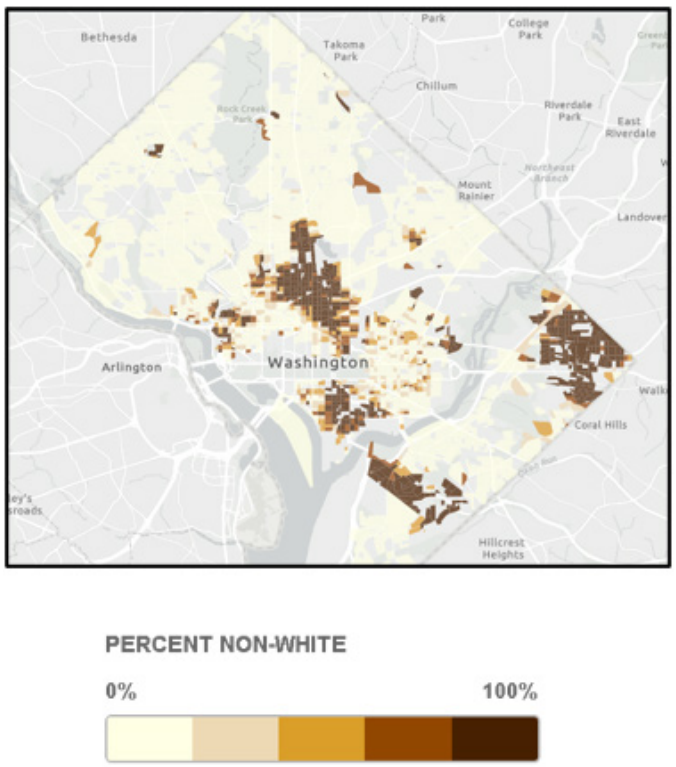
Impact of Redlining on Migration Patterns of Minority Communities

The exact cause of food apartheid remains debated in the available literature; however, it is evident that redlining played a significant role. Redlining segregated low-income communities and people of color, confining them to impoverished areas and creating a system that perpetuated their poverty. Factors such as longer work commutes, cheaper housing, poor diet, and lack of access to quality education made it difficult for these communities to achieve the same job opportunities or social mobility as their wealthier or white counterparts. While this situation fostered a rich culture of art, music, and local identity, it also became a source of stigmatization for minority groups.



Source: Solbert (2024)

Figure 1: Racial Landscape of Washington D.C. in 2010



Source: Solbert (2024)

Figure 1.2: Racial Landscape of Washington D.C. in 1940

Washington, D.C., offers an intriguing example of how redlining impacted migration patterns. Two maps of Washington, D.C. illustrate racial distribution in the city. The map on the top, from 2010, shows a high concentration of white residents in the northwest section of the city, extending to Georgia Avenue, a dividing line between the east and west sides of D.C. The area between the majority white and black communities is home to a large Hispanic and non-white/non-black population. In contrast, African American communities were primarily located near the central downtown areas.

A 2003 initiative by the Home Owners' Loan Corporation (HOLC) attracted 100,000 wealthier families to the city. By 2010, the demographic shift was evident, with more white residents occupying central and downtown areas, as shown in the map by Shaker et al. (2022). This migration pattern in Washington, D.C., exemplifies the displacement of people of color from downtown areas, leading to an increase in the number of wealthier, white residents in what was once known as "Chocolate City." The Georgia Avenue corridor, near Howard University, was notably among the "most whitened" areas in the nation between 2000 and 2010. The city's black population decreased by almost 40,000, while the white population grew by 55,000 (Solbert, 2024).

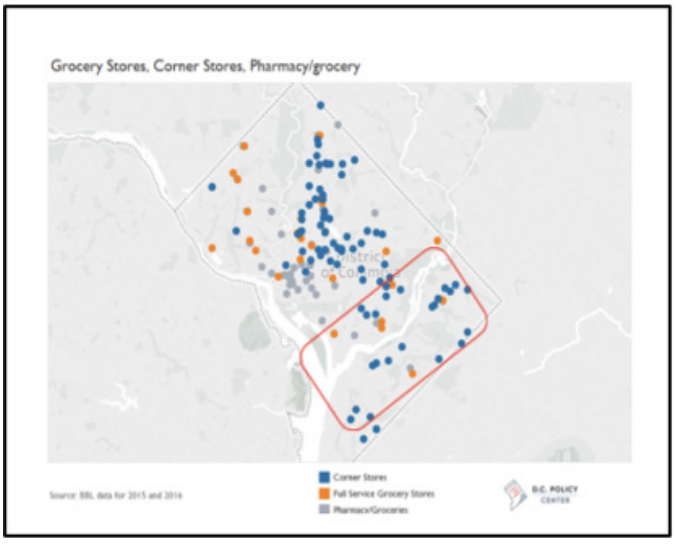
In 2023, approximately 32.4% of the residents of Washington worked in the downtown area, which accounts for only 2 square miles, or 3% of the district's total land mass. Living near downtown provides multiple benefits, including shorter commutes, which directly impact the financial and overall well-being of residents. The data illustrates that historically, white residents who lived near downtown—referred to as "food

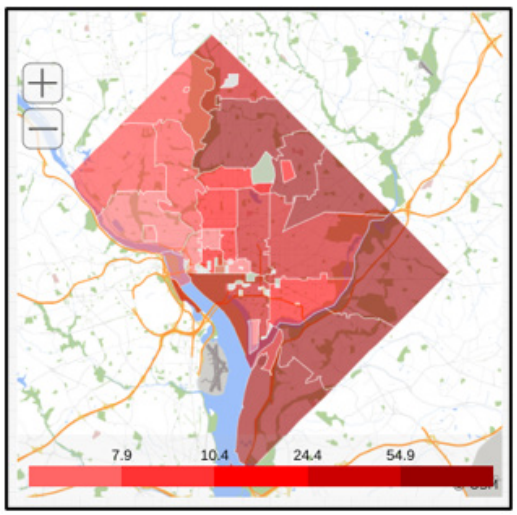
oasis"—benefited from access to better food, housing, and employment opportunities. Meanwhile, non-white residents were often relegated to areas farther away from downtown and its resources.

Impact of Redlining on Food Allocation

Large corporations, including Dollar Tree, Dollar General, McDonald's, KFC, and Burger King, have exploited the systemic inequalities created by redlining to target Black, Latino, and socioeconomically disadvantaged populations. In Washington, D.C., approximately 11% of the district's residents live in food deserts, which equates to around 6.5 miles without access to healthy food options (Food Deserts: Eliminate Food Poverty Now, 2022). Nearly half of the city's food deserts are concentrated in the 7th and 8th wards (east and southeast D.C.), areas with the highest concentration of minority populations.

In the maps below, the red areas represent neighborhoods with a higher percentage of Black residents. These areas overlap with regions highlighted in a bolded red box, which correspond to neighborhoods with the fewest full-service grocery stores and pharmacies in the city. For example, within the marked red box, there are only six full-service grocery stores and two pharmacies—these are scattered across the area compared to higher-income, majority-white neighborhoods, which typically have more convenient access to such services. As a result, redlining has had a direct and lasting impact on the quality of food available in these neighborhoods. This disparity raises the question: which neighborhoods have access to healthy food, and which are systematically denied it?





Figures 2.1 and 2.2: Food Deserts-Eliminate Food Poverty Now (2022)

Lack of Affordable Transportation and Access To Food

The lack of transportation is a significant barrier to food access in minority communities. When low-income families struggle to afford rent, they often cannot afford personal vehicles to drive to grocery stores located outside their neighborhoods. This issue would be alleviated if more full-service grocery stores were available within these communities or within a reasonable walking distance. The absence of personal transportation has numerous negative consequences for food access. For instance, owning a car can be the deciding factor in being able to get to work on time, drop children off at school, or visit a grocery store with quality food options. Without a car, families are often dependent on unreliable public transportation, which can affect their economic stability. If individuals arrive late to work due to transportation issues, they may be viewed as less reliable and, consequently, less likely to receive promotions or job opportunities.

A map illustrating vehicle ownership in D.C. shows that fewer people in areas with higher minority populations (represented in green) own cars. This reinforces how redlining has historically placed Black and Brown communities further from resource-rich neighborhoods. Without personal vehicles, residents in these areas face reduced access to healthy food, which can have lasting effects on their financial and physical health.

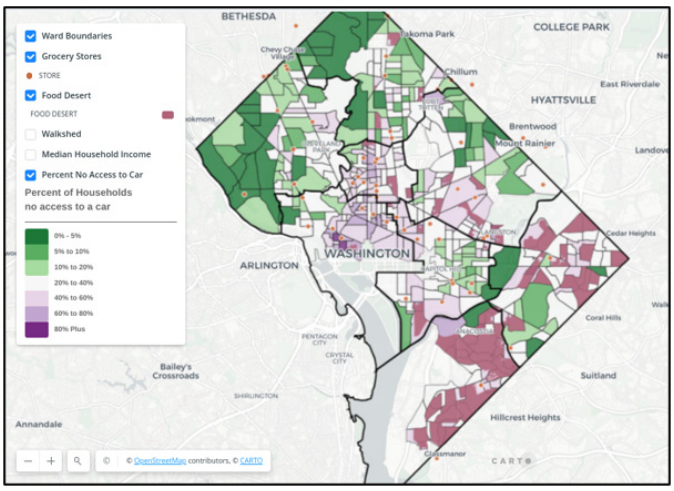


Figure 3: Vehicle Ownership in Washington, D.C.

Health Impact of Food Apartheid

Predatory advertising has significantly increased the profit margins of fast-food corporations by fostering lifelong customers in low-income communities where food apartheid is prevalent. This issue is particularly problematic for Black and Brown communities, who experience higher rates of stress and mental health challenges linked to institutional racism—such as in education, employment, housing, police profiling, and exposure to crime (Orelus, 2012). When food apartheid is added to these existing pressures, the cumulative impact on Black and Brown children can be devastating. Low-nutrient diets, which are common in food apartheid areas, have direct negative effects on both mental and physical health.

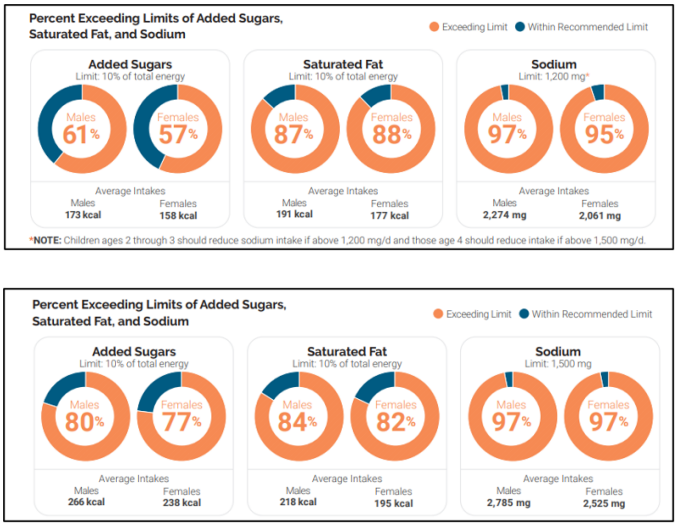
The high prevalence of fast-food chains in Washington, D.C.'s 7th and 8th wards—predominantly Black and Brown neighborhoods—illustrates the detrimental effects of food apartheid. These areas are marked by an overabundance of food options high in fats, sugars, salt, and chemicals, all of which contribute to poorer health outcomes in these communities.

Low-Nutrition Diet Composition

The term "fast food" refers to food that is "designed for ready availability, use, or consumption with little consideration given to quality or significance" (Merriam-Webster's Collegiate Dictionary, 2024). Common examples include French fries, burgers, hot dogs, and fried chicken. The primary contributors to a low-nutrition diet in food apartheid areas are saturated fats, excessive salt, high-calorie counts, low protein, and high carbohydrates. According to the *Dietary Guidelines for Americans, 2020-2025*, published by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services, individuals should "Limit Foods and Beverages Higher in Added Sugars, Saturated Fat, and Sodium" (Dietary Guidelines for Americans, 2020).

Below are two pie charts that depict the recommended daily intake of calories for various age groups and gender, specifically focusing on added sugars, saturated fats, and sodium. The charts also show the percentage of individuals who exceed these recommended limits. The first chart refers to children aged 2 to 4. In this group, 61% of males exceed the daily limit for added sugars, and 97% exceed the daily limit for sodium. The second chart pertains to children aged 5 to 8. Here, 81% of males exceed the daily limit for added sugars, and 97% exceed the daily limit for sodium.

An additional factor to consider is the overall calorie content of foods. For example, a typical Happy Meal contains 501 calories. This meal, designed for children aged 3 to 9, includes 16 grams of fat, of which 4.7 grams are saturated fats, 577 mg of sodium, 34 grams of sugar, and 16 grams of protein. For children between the ages of 3 and 9, who should consume approximately 1,200 to 1,800 calories per day, one Happy Meal can account for about half of their daily caloric intake. This equates to more than one-third of a girl's daily caloric needs and about one-third of a boy's.



Source: USDA and The Department Of Human Services (2020)

Figure 4: Recommended daily intake of calories for various age groups and genders

Impact of Food Apartheid on Pediatric Physical Health

The most notable physical consequence of food apartheid is the American pediatric obesity epidemic. Obesity is defined as "abnormal or excessive fat accumulation that presents a health risk." A body mass index (BMI) over 25 is considered overweight, and a BMI over 30 is classified as obese. Recognizing obesity as a disease is essential due to the long-standing stigma and bias faced by individuals who are overweight or obese, both from the public and medical professionals, as well as the associated health risks. Currently, 20% of American youth are classified as overweight. In recent years, obesity rates have doubled among children ages 2 to 5 (from 5.0% to 12.4%) and among children ages 6 to 11 (from 6.5% to 17.0%). In adolescents ages 12 to 19, obesity prevalence has tripled (from 5.0% to 17.6%) (APA, 2012).

According to the World Health Organization, the physical health impacts of childhood obesity and being overweight include cardiovascular diseases (primarily heart disease and stroke), diabetes, musculoskeletal disorders (especially osteoarthritis), and certain types of cancer (endometrial, breast, and colon). In 2019, an estimated 5 million deaths from noncommunicable

diseases (NCDs) were attributed to a higher-than-optimal BMI (World Health Organization, 2024). High blood pressure is also more common in children with obesity, with 1 in 25 youth ages 12 to 19 diagnosed with hypertension. Thus, the excessive consumption of fats, sugars, and salt significantly increases the risk of developing potentially life-threatening diseases in pediatric populations due to childhood obesity.

Obesity is also disproportionately associated with race. Among non-Hispanic Black youth, 23.5% experience obesity, a rate significantly higher than that of non-Hispanic White or non-Hispanic Asian children. Additionally, 24.1% of children from the lowest-income families have obesity, compared to only 9.7% of children from the highest-income families. In Washington, D.C., 19% of children ages 6-17 are obese, marking the city as having the 9th highest rate of obesity nationally (State of Childhood Obesity, 2024). This highlights how children in D.C. are particularly burdened by food apartheid.

Impact of Food Apartheid on Pediatric Mental Health

Cain et al. (2022) concluded:

"This systematic review revealed that food insecurity is associated with a variety of mental health outcomes in both parents and children. A majority of studies demonstrated a statistically significant relationship between food insecurity and symptoms of depression, anxiety, and stress in parents. In children, food insecurity had a statistically significant association with symptoms of depression, externalizing behaviors, internalizing behaviors, and hyperactivity in a majority of studies."

The mental and physical effects of food apartheid are closely intertwined, with pediatric obesity serving as a key example of this relationship. A study in 2023 found that children who had experienced racial discrimination were more likely to develop anxiety, which in turn is a risk factor for obesity. These children may also face more severe health problems later in life (Cuevas et al., 2023).

Social media has also been identified as a significant contributor to detrimental pediatric health outcomes. High exposure to social media has been shown to double a child's risk of developing depression or anxiety, conditions that are closely linked to pediatric obesity. Additionally, the American Psychological Association (2012) notes that frequent social media exposure can alter parts of the brain related to emotions and learning, impacting impulse control, social behavior, emotional regulation, and sensitivity to social rewards and punishments.

This effect has been particularly pronounced among Black, Latino, and Asian children, who are often negatively portrayed, underappreciated, and undervalued in media. Such portrayals contribute to increased rates of anxiety, depression, and suicidal tendencies among these children. At the heart of these issues lies a pervasive sense of inferiority instilled in minority children, leading them to believe they are "not enough" or will never measure up to their white counterparts. This mindset perpetuates a cycle of disadvantage, keeping them at the bottom of the social ladder and making it difficult to break free.

Thus, racial discrimination, anxiety, social media exposure, and obesity are interconnected and mutually reinforcing, contributing to the challenges faced by children in food apartheid areas.

CONCLUSION

In total, the lack of equitable access to healthy food has disproportionately affected communities of color compared to majority-white communities. This inequality stems largely from corporate greed and the relentless pursuit of profit by large companies, which often fail to consider the detrimental effects their actions have on the health of children in minority communities. Redlining has played a significant role in segregating and isolating minority populations, making them more vulnerable to exploitation through the unhealthy food options available to them. By enticing these communities with low-cost options, they are coerced into adopting diets that are insufficient, nutrient poor, and unhealthy.

Food apartheid has utilized various strategies, including misinformation, lack of education, and false advertising, to systematically undermine the health of Black and Brown children and their communities. In response to this, many food sovereignty leaders have been actively working to combat food apartheid by promoting alternatives to the current corporate-controlled food system.

As defined by the Nyéléni Forum in 2007 at the first global forum on food sovereignty held in Mali, food sovereignty is "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute, and consume food at the heart of food systems and policies rather than the demands of markets and corporations."

In pursuit of food sovereignty, Washington D.C. resident Kenneth Bridges exemplifies this commitment by driving for several hours to a communal farm in Preston, Maryland, where he harvests produce and brings it back to the Ward 8 community in Washington, D.C. (Rhoads et al., 2024). His work, along with that of others, aims to provide affordable, fresh produce to low-income communities by establishing and maintaining local farms, greenhouses, and other sustainable food sources, free from corporate intervention.

As John Lewis famously said, *"Ours is not the struggle of one day, one week, or one year. Ours is not the struggle of one judicial appointment or presidential term. Ours is the struggle of a lifetime, or maybe even many lifetimes, and each one of us in every generation must do our part."*

This paper represents my contribution to that ongoing struggle.

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